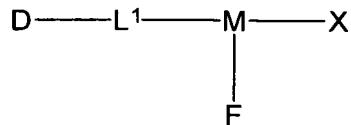


Amendments to the Claims

Claim 1 (currently amended): A compound having the formula (I):



(I)

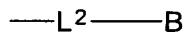
wherein:

D is a fluorescent dye selected from an acridone and a quinacridone dye;

F comprises a target bonding group selected from a carboxylic acid thioester group and a 1,2-aminothiol group;

M is a group adapted for attaching to F;

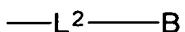
X is selected from hydrogen or the group:



wherein B is an affinity tag; and

L¹ and L² each independently ~~comprise~~ include a group containing from 1 – 40 linked atoms selected from carbon atoms which may optionally include one or more groups selected from –NR'–, –O–, –CH=CH–, –CO–NH– and phenylenyl groups, where R' is selected from hydrogen and C₁ – C₄ alkyl.

Claim 2 (currently amended): ~~A compound according to The compound of claim 1,~~ wherein X is the group:



~~wherein B and L² are hereinbefore defined.~~

Claim 3 (currently amended): A compound according to The compound of claim 1, or claim 2 wherein each of L¹ and L² contains from 2 to 30 atoms.

Claim 4 (currently amended): A compound according to The compound of claim 1, or claim 2 wherein L¹ and L² are independently selected from the group:

-{(CHR')_p-Q-(CHR')_r}_s-

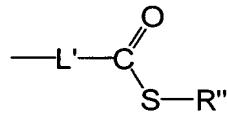
where Q is selected from the group consisting of: -CHR'-, -NR'-, -NR'', -O-, -CH=CH-, -Ar- and -CO-NH-; R' is hydrogen or C₁ – C₄ alkyl, p is 0 – 5, r is 1 – 5 and s is 1 or 2.

Claim 5 (currently amended): A compound according to The compound of claim 4, wherein Q is selected from the group consisting of -CHR'-, -O- and -CO-NH-, where R' is hereinbefore defined.

Claim 6 (currently amended): A compound according to any of claims 1 to 5 The compound of claim 1, wherein said affinity tag is selected from the group consisting of biotin and desthiobiotin.

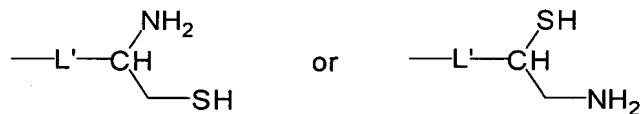
Claim 7 (currently amended): A compound according to any of claims 1 to 5 The compound of claim 1, wherein said affinity tag is selected from the group consisting of his-tag, iminodiacetic acid and nitrilotriacetic acid.

Claim 8 (currently amended): A compound according to any of claims 1 to 7 The compound of claim 1, wherein the target bonding group F is a carboxylic acid thioester of formula:



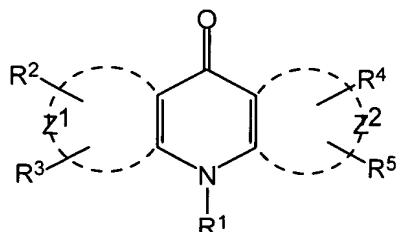
wherein L' is a bond or is a group containing from 1 – 30 linked atoms selected from the group consisting of carbon atoms and optionally carbon atoms including one or more groups selected from the group consisting of —NH—, —O— and —CO—NH—; and R'' is C₁ – C₄ alkyl, C₆ – C₁₀ aryl, or C₇ – C₁₅ aralkyl, which may be optionally substituted with sulphonate; or is the group —(CH₂)₂—CONH₂.

Claim 9 (currently amended): A compound according to any of claims 1 to 7 The compound of claim 1, wherein the target bonding group F is a 1,2-aminothiol group of formula:



wherein L' is hereinbefore defined a bond or is a group containing from 1 – 30 linked atoms selected from the group consisting of carbon atoms and carbon atoms including one or more groups selected from the group consisting of —NH—, —O— and —CO—NH—.

Claim 10 (currently amended): A compound according to any of claims 1 to 9 The compound of claim 1, wherein the compound is an acridone dye having the formula (II):



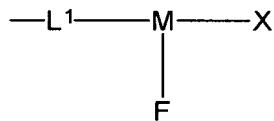
(II)

wherein:

groups R² and R³ are attached to the Z¹ ring structure and groups R⁴ and R⁵ are attached to the Z² ring structure;

Z¹ and Z² independently represent the atoms necessary to complete one ring or two fused ring aromatic or heteroaromatic systems, each ring having five or six atoms selected from carbon atoms and optionally no more than two atoms selected from oxygen, nitrogen and sulphur;

at least one of groups R¹, R², R³, R⁴ and R⁵ is a group W having the formula:

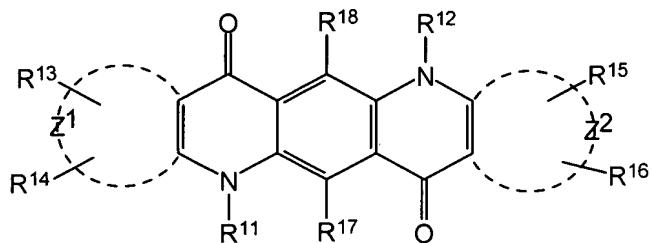


where F, M, X and L¹ are hereinbefore defined;

when any of said groups R¹, R², R³, R⁴ and R⁵ is not said group W, said remaining groups R², R³, R⁴ and R⁵ are independently selected from the group consisting of hydrogen, halogen, amide, cyano, mono- or di-C₁ – C₄ alkyl-substituted amino, carbonyl, carboxyl, C₁ – C₆ alkoxy, acrylate, vinyl, styryl, aryl, heteroaryl, C₁ – C₂₀ alkyl, aralkyl, sulphonate, sulphonic acid, quaternary ammonium and the group -(CH₂)_n-Y; and [.,.]

when group R¹ is not said group W, it is selected from the group consisting of hydrogen, C₁ – C₂₀ alkyl, aralkyl and the group –(CH₂)_n–Y; and Y is selected from the group consisting of sulphonate, sulphate, phosphonate, phosphate, quaternary ammonium and carboxyl; and n is an integer from 1 to 6; provided that at least one of groups R¹, R², R³, R⁴ and R⁵ is a water solubilising group.

Claim 11 (currently amended): ~~A compound according to any of claims 1 to 9~~ The compound of claim 1, wherein the compound is a quinacridone dye having the formula (III):



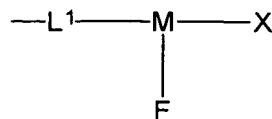
(III)

wherein:

groups R¹³ and R¹⁴ are attached to the Z¹ ring structure and groups R¹⁵ and R¹⁶ are attached to the Z² ring structure;

Z¹ and Z² independently represent the atoms necessary to complete one ring or two fused ring aromatic or heteroaromatic systems, each ring having five or six atoms selected from carbon atoms and optionally no more than two atoms selected from oxygen, nitrogen and sulphur;

at least one of groups R¹¹, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ is a group T having the formula:



~~where F, M, X and L¹ are hereinbefore defined;~~

when any of said groups R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ is not said group T, said remaining groups R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ are independently selected from the group consisting of hydrogen, halogen, amide, cyano, mono- or di-C₁ – C₄ alkyl-substituted amino, carbonyl, carboxyl, C₁ – C₆ alkoxy, acrylate, vinyl, styryl, aryl, heteroaryl, C₁ – C₂₀ alkyl, aralkyl, sulphonate, sulphonic acid, quaternary ammonium and the group -(CH₂)_n-Y; and [,.]

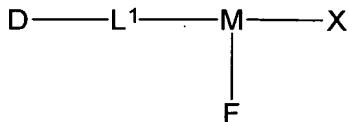
when either of groups R¹¹ and R¹² is not said group T, it is selected from the group consisting of hydrogen, C₁ – C₂₀ alkyl, aralkyl and the group -(CH₂)_n-Y; Y is selected from the group consisting of sulphonate, sulphate, phosphonate, phosphate, quaternary ammonium and carboxyl; and n is an integer from 1 to 6; provided that at least one of groups R¹¹, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ is a water solubilising group.

Claim 12 (currently amended): A compound according to The compound of claim 10, or ~~claim 11~~ wherein Z¹ and Z² are selected independently from the group consisting of phenyl, pyridinyl, naphthyl, quinolinyl and indolyl moieties.

Claim 13 (currently amended): A compound according to The compound of claim 10, or ~~claim 11~~ wherein Z¹ and Z² are selected from phenyl and naphthyl moieties.

Claim 14 (currently amended): A method for labelling a protein of interest wherein said protein contains or is derivatised to contain an N-terminal cysteine, the method comprising:

- i) adding to a liquid containing said protein a compound of formula (I):



(I)

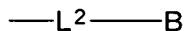
wherein:

D is a fluorescent dye selected from an acridone and a quinacridone dye;

F comprises a target bonding group selected from a carboxylic acid thioester group and a 1,2-aminothiol group;

M is a group adapted for attaching to F;

X is selected from hydrogen or the group:



where B is an affinity tag; and

L¹ and L² each independently comprise include a group containing from 1 – 40 linked atoms selected from carbon atoms and carbon atoms which may optionally include one or more groups selected from the group consisting of –NR'–, –O–, –CH=CH–, –CO–NH– and phenylenyl groups, where R' is selected from hydrogen and C₁ – C₄ alkyl; and

- ii) incubating said compound with said protein under conditions suitable for labelling said protein.

Claim 15 (currently amended): A compound according to The method of claim 14,
wherein each of L¹ and L² contains from 2 to 30 atoms.

Claim 16 (currently amended): A method according to The method of claim 14,
wherein L¹ and L² are independently selected from the group:

-{(CHR')_p-Q-(CHR')_r}_s-

where Q is selected from the group consisting of: -CHR'-, -NR'-, -NR'₁-, -O-,
-CH=CH-, -Ar- and -CO-NH-; R' is hydrogen or C₁ – C₄ alkyl, p is 0 – 5, r is 1 –
5 and s is 1 or 2.

Claim 17 (currently amended): A method according to The method of claim 16,
wherein Q is selected from the group consisting of -CHR'-, -O- and -CO-NH-,
where R' is hereinbefore defined.

Claim 18 (currently amended): A method according to any of claims 14 to 17 The
method of claim 14, wherein X is the group:

—L²—B

wherein B and L2 are hereinbefore defined, said method further comprising
separating and/or purifying the dye-labelled protein of interest by affinity
chromatography.

Claim 19 (currently amended): A method according to any of claims 14 to 18 The
method of claim 14, wherein said protein of interest is selected from antibody,
antigen, protein, peptide the group consisting of antibodies, antigens, proteins,
peptides, microbial materials, cells and cell membranes.

Claim 20 (new): The compound of claim 11, wherein Z¹ and Z² are selected independently from the group consisting of phenyl, pyridinyl, naphthyl, quinolinyl and indolyl moieties.

Claim 21 (new): The compound of claim 11, wherein Z¹ and Z² are selected from phenyl and naphthyl moieties.